

# Gastric Surgery Division

## Introduction

In this division, not only gastric adenocarcinoma but also sarcomas of gastric origin such as malignant lymphoma or leiomyosarcoma are treated. Principally, tumors of the cardia are treated in this division.

## Routine Activities

There are four staff surgeons, a chief resident and three to four rotating residents at one time in the division. Ten to 14 patients are operated on every week.

This division shares the same ward with the Gastrointestinal Medical Oncology Division so that specialists could treat any patient with gastric cancer comprehensively from both divisions. Patients who undergo curative resection are followed up without adjuvant chemotherapy which is used exclusively in clinical trials or when strongly requested by patients.

Patients with a small superficial lesion of well-differentiated histology are treated by endoscopic mucosal resection (EMR). Some undergo subsequent surgery based on histological findings of the resected specimen. Every Tuesday from 6:15 to 7:00 P.M., a clinical conference is held attended by surgeons, medical oncologists and endoscopists. All patients with gastric malignancy in the ward or on the waiting lists for admission are briefly reviewed and those whose treatment is controversial are discussed in detail. Every Friday between 4:00 and 5:30 P.M., another clinical conference is held, in which endoscopists and radiologists present all surgical and EMR candidates for the following week, and the treatment strategy is discussed in detail in each case. These conferences are held in English whenever a foreign guest doctor is present.

The division has some involvement in the activities of the WHO Collaboration Center for Primary Prevention, Diagnosis and Treatment of Gastric

Cancer, the president of which is M. Sasako, Chief of the division. Education of foreign surgeons is regarded as one of the important roles of this division. In 2003, more than 30 surgeons from various countries visited the Division for 2 to 12 weeks to learn about the management of gastric cancer patients, especially surgical techniques of lymph node dissection and postoperative care. All staff surgeons have sufficient experience in teaching in English.

## Research Activities

Genomic scanning in gastric cancer family is being carried out in cooperation with the Biology Division, and Cancer Information and Epidemiology Division of the National Cancer Center Research Institute. Millennium genome project, analysis of SNPs, to investigate susceptibility to gastric cancer is also being carried out. Causation of type 4 gastric cancer related to heritable factors or environmental factors was evaluated in cooperation with Cancer Information and Epidemiology Division. Function preserving gastrectomies such as pylorus preserving gastrectomy, proximal gastrectomy applied prospectively for early cancer. Laparoscopic gastrectomy is also being attempted for patients with early gastric cancer (H. Katai). Patients with advanced tumors are, when eligible, invited to participate in one of the ongoing clinical trials in our division mentioned below. Significance of immunohistochemically detected micrometastases in the bone marrow are being analyzed (T. Fukagawa)

## Clinical Trials

Our division has been playing the central role in conducting the multi-institutional clinical trials. M. Sasako and T. Sano are the representative of the Gastric Cancer Surgical Study Group of Japan Clinical Oncology Group (JCOG). Two randomized controlled trials are currently underway in the division in a multi-

institutional setting. ACTS-GC was designed to evaluate adjuvant chemotherapy with the oral agent S-1 for curatively resected stage II, III, IV tumors comparing surgery alone with surgery plus chemotherapy. The other is the trial to evaluate significance of splenectomy for upper third advanced cancer (JCOG 0110-MF). The trial includes evaluation of long-term survival, postoperative morbidity and mortality and QOL. The JCOG 9502 trial to evaluate surgical procedures and compares two commonly used approaches for gastric cancers

invading the esophagus closed for enrollment in the end of 2003. A phase II trial to evaluate the effect of neo-adjuvant chemotherapy for patients with extensive lymph node metastasis (CDDP+CPT11, JCOG 0001), for patients with type 4 cancer (S-1, JCOG 0002), and for patients with large type3 and type4 cancers (S-1+CDDP, JCOG 0210) were being carried out.

● H. Katai ●

Number of Patients	
Adenocarcinoma	551
Myogenic tumors	8
Malignant lymphoma	0
<b>Total</b>	<b>559</b>

Five-year Survival Rate According to Tumor Stage		
Stage	No. of patients	5-yr survival
I	757	91.2%
II	122	80.9%
III	187	54.7%
IV	224	9.4%
<b>Total</b>	<b>1,290</b>	<b>71.4%</b>

Results for the patients treated in 1990-1994.

Operative Procedures	
Distal gastrectomy	210
Total gastrectomy	180
Pylorus preserving gastrectomy	114
Proximal gastrectomy	15
Wedge resection	8
Segmental resection	5
Pancreaticoduodenectomy	0
Laparoscopic distal gastrectomy	12
Others (staging laparotomy, etc)	15
<b>Total</b>	<b>559</b>